

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7558

|   |   |                             |
|---|---|-----------------------------|
| Petition of Green Mountain Power Corporation for    | ) | Technical Hearing           |
| a Certificate of Public Good, pursuant to 30 V.S.A. | ) | held at Montpelier, Vermont |
| Section 248, authorizing the installation and       | ) | December 21, 2009           |
| operation of three temporary wind meteorological    | ) |                             |
| towers on Lowell Mountain in Lowell, Vermont        | ) |                             |

Order entered: 2/8/2010

HEARING OFFICER: Mary Jo Krolewski, Utilities Analyst

APPEARANCES: Geoff Commons, Esq.  
for Vermont Department of Public Service

Peter Zamore, Esq.  
Sheehey Furlong & Behm, P.C.  
for Green Mountain Power Corporation

Judith Dillon, Esq.  
for Vermont Agency of Natural Resources

Milo and Bonnie Day  
pro se

Kevin McGrath  
pro se

Donald and Shirley Nelson  
pro se

Roger Stewart  
pro se

## **I. INTRODUCTION**

This case involves a petition filed by Green Mountain Power Corporation ("GMP") on August 7, 2009, and supplemented on September 9, 2009. The petition requests a certificate of public good ("CPG") under 30 V.S.A. § 248 authorizing the installation and operation of three temporary wind meteorological towers on Lowell Mountain in Lowell, Vermont.

In this Proposal for Decision, I recommend that the Public Service Board ("Board") approve the proposed project and issue a certificate of public good to GMP authorizing construction of the proposed project, with conditions. These conditions include a requirement for the construction to begin after March 2, 2010, the removal of the wind measurement towers and associated equipment after five years, and the restoration of tower sites upon removal.

## **II. PROCEDURAL HISTORY**

On August 7, 2009, GMP filed a petition for a CPG, pursuant to 30 V.S.A. § 248(j), requesting approval to install and operate three temporary wind meteorological towers on Lowell Mountain in Lowell, Vermont.

On September 18, 2009, the Board issued a letter stating that the proposed project would not be accepted under Section 248(j) and would instead be reviewed pursuant to the full requirements of Section 248.

On October 13, 2009, I held a prehearing conference at the Board's hearing room in Montpelier, Vermont.

On September 9, 2009, GMP filed a letter containing waivers of the 45-day advance filing requirement of Section 248(f) from the Lowell Planning Commission, Lowell Select Board, and Northeastern Vermont Development Association.<sup>1</sup> I am admitting GMP's letter into evidence in this proceeding as exhibit GMP-Letter-1.<sup>2</sup>

On November 9, 2009, a site visit was held at sites on and near Lowell Mountain and a public hearing was held at the Lowell School. Over 30 members of the public provided comment

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1. Letter from Peter Zamore, Esq., Sheehy Furlong & Behm P.C., to Susan Hudson, Clerk of the Board, September 9, 2009.

2. Any party wishing to object to the admission of GMP's letter into evidence should do so in its comments on this Proposal for Decision.

at the public hearing. An additional sixteen members of the public submitted written comments. These comments are summarized below.

On November 30, 2009, in an Order on Motions to Intervene, I granted permissive intervention on the issues of aesthetics and economic impact to Don and Shirley Nelson, Kevin McGrath, Bonnie and Milo Day, and Roger Stewart.

On December 7, 2009, I approved a proposed Protective Agreement.

In a December 10, 2009, memorandum, I identified nine questions regarding the petition and requested that GMP be prepared to answer them at the technical hearing. On December 18, 2009, GMP filed responses to the questions.

A technical hearing was held on December 21, 2009, in the Board's hearing room in Montpelier, Vermont. At the hearing, the prefiled testimony and exhibits of GMP, the Vermont Department of Public Service ("Department"), Don and Shirley Nelson, and Milo and Bonnie Day were entered into evidence.

On December 22, 2009, the Department filed an additional exhibit on behalf of the Nelsons. Parties at the technical hearing had stated that there were no objections to the admission of the exhibit into the evidentiary record.

On December 23, 2009, proposed findings and briefs were filed by GMP, the Department, and the Nelsons.

On December 23, 2009, GMP filed copies of permits required for the proposed project.<sup>3</sup> I am admitting GMP's letter into evidence in this proceeding as exhibit GMP-Letter-2.<sup>4</sup>

### **III. PUBLIC COMMENTS**

A public hearing was conducted on November 9, 2009, at which over thirty members of the public provided comments on the project. In addition, the Board received sixteen written comments on the proposed project.

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3. Letter from Peter Zamore, Esq., Sheehey Furlong & Behm P.C., to Susan Hudson, Clerk of the Board, December 23, 2009.

4. Any party wishing to object to the admission of GMP's letter into evidence should do so in its comments on this Proposal for Decision.

Many commenters raised concerns about the impacts of a possible future wind generation project on Lowell Mountain.

Several commenters stated their opposition to the proposed wind measurement towers, while several commenters supported the installation of the proposed towers.

Some commenters question the need for the proposed project given previous wind measurement data collected on Lowell Mountain<sup>5</sup> and given a scheduled March 2, 2010, vote by the town of Lowell on a possible future wind generation project. GMP has indicated that it will not propose or construct a wind generation facility at the site if the town of Lowell votes against such a facility.<sup>6</sup>

Some commenters raised concerns about the aesthetic impacts of the project, including the lighting of the proposed towers. One commenter raised concerns about impacts to historical property in view of the proposed project. Other commenters raised concerns with regard to the economic impact of the project with regard to property values and tourism.

A few commenters had concerns about the equipment used to access the proposed sites and how access roads may be developed. Other commenters had questions on the tower foundations, ground disturbance during construction, and site restoration. One commenter question whether the information on proposed project construction provided in GMP's letter to the Lowell Select Board was consistent with the information provided in its petition to the Board.

### Discussion

A large number of the comments received involved the impacts of a wind generation facility on Lowell Mountain. It is important to clarify the limited scope of the proposal that is currently before the Board. GMP is seeking approval for temporary wind measurement towers that will be in place for no more than five years. While measurement towers are necessary precursors for a wind generation facility, the Board's approval of a wind measurement tower is not precedential with regard to any future petition for a wind generation facility. A wind measurement tower gathers data that may show that the wind resource is insufficient. The Board has denied approval of a petition for a wind generation facility after approval of a temporary

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5. See Petition of enXco (East Coast), Docket 6784, Order of 1/29/03.

6. Exh. GMP-Supp-1 at 3.

wind measurement tower.<sup>7</sup> Any subsequent request for approval to construct a wind generation facility will be subject to a separate proceeding.

With regard to the additional concerns raised by the commenters, as addressed in the findings and discussion below, there is sufficient information in the record to determine that the proposed project will not have an undue adverse impact on the statutory criteria of Section 248(b)(2).

#### **IV. FINDINGS**

Based on the substantial evidence of record and the testimony presented at the hearing, I hereby report the following findings to the Board in accordance with 30 V.S.A. § 8.

##### **Background and Project Description**

1. GMP is a company as defined by 30 V.S.A. § 201 and as such is subject to the Board's jurisdiction pursuant to 30 V.S.A. § 203. Petition at 1.

2. The proposed project consists of the construction and operation of three temporary wind measurement stations to measure the wind resource along the ridge of Lowell Mountain. Staskus pf. at 5.

3. The proposed wind measurement stations will be located on several parcels of land owned by Moose Mountain Forestry, LLC ("MMF") and Wind Blown Energy LLC ("WBE") in the southeastern portion of the town of Lowell, Vermont, located on the ridgeline of Lowell Mountain. GMP has acquired the rights to install and maintain the wind measurement stations from MMF and WBE. Staskus pf. at 1-2, 11; exh. GMP-MS-2.

4. The wind measurement tower at Site A will be located on MMF lands, approximately 3100 feet from the MMF northern ridgeline boundary at an elevation of 2350 feet above sea level. At site A, the existing forest canopy is open with predominately young vegetation. Staskus pf. at 4.

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7. See Docket 6748, Order of 10/4/02, approving a wind measurement tower on East Mountain; Docket 6911, Order of 7/17/06, denying the wind-generating facility proposed for the site.

5. The wind measurement tower at Site B will be located on MMF lands at an elevation of approximately 2548 feet above sea level. Site B is the location of a previous wind meteorological station operated between 2003 and 2008.<sup>8</sup> The site and access to the site were cleared and brushed out in connection with the prior wind meteorological tower. Since the tower's removal in 2008, revegetation, predominately softwood, has begun at this location. Staskus pf. at 3-4.

6. The wind measurement tower at Site C will be located on the WBE parcel, approximately 1200 feet to the south of the southern ridgeline boundary of the MMF lands, at an elevation of 2464 feet above sea level. At Site C, the existing forest canopy is open with predominately young hardwood vegetation. Staskus pf. at 5.

7. The tower structure at each site will consist of a guyed, galvanized three-sided steel lattice tower, 18 inches on each side. The structure at Site B will be 164 feet tall, which is the height of the previous station at Site B. This will enable new wind measurement data to be accurately correlated to the data supplied by the previous tower. The stations at Sites A and C will be 262 feet tall, which is the expected height of wind turbine hubs, in the event wind generation is subsequently developed along the ridge. Staskus pf. at 3-4, 5-7; exh. GMP-MS-4b.

8. The meteorological instrumentation at each wind measurement station will consist of anemometers, direction sensors, and temperature sensors. Sensors will be attached to the towers at multiple levels above ground with redundant sensors at the upper two levels. Temperature sensors and other sensors and operational equipment, including an electronic data recorder and photovoltaic panel, will be installed approximately 3 meters above ground level. Data provided from the sensors will be collected and recorded on the electronic data recorders and transmitted via cell phone, minimizing the need to access the site during the operational period. Staskus pf. at 7.

9. At the request of the Agency of Natural Resources ("ANR"), in order to identify and survey bat populations, Anabat detector data collection equipment will be installed at the top of the Site A and C stations. Staskus pf. at 7.

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8. See Petition of enXco (East Coast), Docket 6784, Order of 01/29/03.

10. Because Sites A and C will have towers higher than 200 feet, and in accordance with Federal Aviation Administration ("FAA") guidelines, each tower at Sites A and B will be lit by three red LED lights and painted with seven alternating orange and white bands. Each of the two towers will include one flashing light installed at the top and two steady-burning lights installed at the mid-point, about 131 feet above ground. An FAA Determinations of No Hazard has been issued for the Site A tower and the Site C tower. Staskus pf. at 7.

11. Each tower base will be installed on a concrete pier foundation, three feet in diameter by six and half feet tall, resting on a buried concrete slab, six feet long by six feet wide by one-and-a-half feet high, with all but one foot of the pier below grade. In the event that any foundation cannot be located at the planned depth due to ledge, it will sit directly on ledge, and the above-ground portion may be increased to up to two feet above ground. Staskus pf. at 5-6; exh. GMP-MS-4e.

12. The tower will be secured by guy wires from three directions. The guy wires will be secured to concrete anchor footings, eight feet long by two and a half feet wide by two and a half feet high, placed five feet below grade. In the event that any anchor footings cannot be located at the planned depth due to ledge, the affected guys will be anchored directly into ledge by means of a rock anchor approximately two inches in diameter. Staskus pf. at 6; exh. GMP-MS-4f.

13. The tower foundation and anchor footing dimensions assume that no ledge is encountered at the proposed tower sites. In the event ledge is encountered, the foundations will be smaller and secured to the ledge. The tower manufacturer required the same foundation dimensions for all three towers, despite the different tower heights. Tr. 12/21/09 at 10-13 (Staskus).

14. The foundation and each guy anchor footing will require excavation of between approximately 150 square feet and 420 square feet. Any attachments to ledge will be made by drilling and there will be no blasting at any of the sites. Staskus pf. at 6.

15. The concrete for the tower foundations and anchor footings will be bag-mixed at the sites by hand and by portable mixer, and to the extent necessary based on weather conditions, heated by portable heaters. The bagged concrete, water, fuel, generators and heaters to cure the

concrete will be transported to the site with the towers and other equipment. Exh. GMP-Supp-1 at 1.

16. The tower sections will be assembled vertically, by stacking each section on top of the previously-installed section. Staskus pf. at 5.

17. An area of 0.75 acres will be cleared at each site, although there will be minimal clearing required for Site B due to the previous tower installation. Felled trees and brush will be left on site, except that logs may be removed by the landowner. Ground disturbance related to all three towers will be limited to the foundations and guy anchors, with the amount of disturbance based upon rock and soil conditions. The remaining existing ground cover and root systems will be left in place, encouraging re-vegetation and reducing the potential for soil erosion. Staskus pf. at 5-6.

18. The equipment needed for the proposed project will be delivered to an existing log landing and then transported to the three sites over approximately 3.0 miles of existing haul roads and woods roads and approximately 1.7 miles of new woods roads. Access to Site A will require the construction of approximately 0.5 miles of new woods road. Access to Site B will follow existing hauling and woods roads, some of which were created in connection with the previous wind measurement tower station. Access to Site C will consist of new woods road beginning at Site B and extending along the ridgeline approximately 1.2 miles, utilizing existing woods roads where possible. Staskus pf. at 8; exh. GMP-MS-3.

19. The existing roads are part of MMF's ongoing logging operations, and are managed in accordance with ANR's Parks and Recreation's Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont ("Acceptable Management Practices"). The access roads to the temporary measurement stations will be ten feet in width with overhanging vegetation to be cleared as needed. All roads and access activities will comply with the construction and erosion control measures provided in the Acceptable Management Practices and as addressed further in Findings 55 through 64, below. Staskus pf. at 8-9.

20. The equipment for the proposed project will be transported by tracked or wheeled vehicles no wider than ten feet. The vehicles will include a backhoe/excavator, an air track, a forwarder, a boom truck, a bulldozer, and all-terrain vehicles or snowmobiles. Subsequent site



access will be infrequent, occurring only when needed for periodic seasonal maintenance, and will occur by means of snowmobile or all-terrain vehicle, over the roads described above.

Staskus pf. at 10; exhs. GMP-Supp-1 at 1-2 and GMP-Supp-2.

21. The time frame for the project installation is expected to be a minimum of four weeks, assuming no adverse weather conditions. The proposed project involves two crews: one for access, site preparation and foundations; and the other for tower and equipment installation. Each crew will need at least one week for each site, with the second crew staggered to begin one week after the first crew starts. Staskus pf. at 10-11; exh. GMP-Supp-1 at 3.

22. The wind measurement data from the proposed tower site will be collected for up to five years. Upon termination of the wind evaluation period, the towers and associated equipment will be disassembled and removed, the foundations will be removed to at least one foot below grade, and the anchors will be cut flush to the ledge. Vegetation will be allowed to grow naturally. The towers, equipment, removed portions of concrete bases, and all other removed materials will be transported off the project sites using the same roads and types of vehicles as used for the initial installation. Staskus pf. at 10; exh. GMP-Supp-1 at 2; tr. 12/21/09 at 12 (Staskus).

23. The proposed project is estimated to cost approximately \$500,000. The estimated project costs include \$54,000 for the towers and equipment acquisition for Site A, \$20,000 for Site B, and \$54,000 for Site C, \$91,000 for monitoring equipment, \$148,000 for access, site preparation, transport and installation, \$96,000 for design, permitting and on-going monitoring and \$32,000 as a contingency. Staskus pf. at 10; exh. GMP-Supp-1 at 2.

24. The proposed project will gather wind resource data to determine whether wind-powered electric generation is feasible on Lowell Mountain. GMP has indicated that it will not propose or construct a wind generation facility on Lowell Mountain if the town of Lowell votes against it. The vote is scheduled for March 2, 2010. Exh. GMP-Supp-1 at 3.

### **Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

25. The proposed project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and

regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 26 through 28, below.

26. The proposed wind measurement towers and all related equipment will be completely removed from the site after five years and the sites will be restored. The temporary project will not have an undue adverse impact with respect to land conservation measures contained in the plan of any affected community. Staskus pf. at 10 and 12; exh. GMP-Letter-1.

27. Notice of the proposed project was provided to the Lowell Selectboard, the Lowell Planning Commission and the Northeast Vermont Development Association and waivers of the 45-day advance notice requirement of Section 248(f) were obtained from these entities. Staskus pf. at 11-12; exh. GMP-Letter-1.

28. The Lowell Selectboard declared its support for the proposed project in a letter dated January 20, 2009, filed with the petition. Staskus pf. at 12.

### **Need for Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

29. The proposed project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 30 through 33, below.

30. The proposed wind measurement stations will provide an accurate estimate of wind resources on Lowell Mountain, which is necessary to determine whether wind-powered electric generation is feasible. Staskus pf. at 12.

31. The proposed project will build upon the data collected in connection with a wind measurement tower located previously at Site B. The data collected from the proposed project will be correlated to the previous five-year measurement data, effectively increasing the measurement period and the value of both data sets. Staskus pf. at 3.

32. The proposed project will reduce the uncertainty in estimating the long-term wind resource by: (1) building on previous measurement data, thereby reducing errors associated with

correlations to off-site reference stations; (2) collecting data in close proximity to the prospective wind turbine locations, thereby reducing errors associated with extrapolating estimates produced at measurement station locations to wind turbine locations further away on the ridge; and (3) collecting data at heights that are representative of where wind turbine rotors will be, thereby reducing the uncertainty associated with extrapolating sensor height values to higher levels. Staskus pf. at 3-4.

33. Previous wind measurement data collected indicates that there is sufficient wind resource for a future wind generation project. The proposed project will: (1) improve the efficiency of any future wind generation project by identifying the precise location of individual turbines; (2) facilitate the selection of the most appropriate wind turbines; and (3) reduce cost and financing uncertainty by reducing the uncertainty associated with energy production forecasts. Exh. GMP-Supp-1 at 3-4.

#### Discussion

GMP confirms that previous wind measurement data collected indicates that there is a sufficient wind resource for a future wind generation project on Lowell Mountain. By allowing for the better correlation of data, the proposed project will assist in the selection and siting of wind turbines if a future wind generation project is developed. In addition, the additional data will reduce cost and financing uncertainty associated with any future wind generation project. Therefore, assuming its continued plans to pursue a future wind generation project, I conclude that the need for the proposed project has been adequately demonstrated under Section 248(b)(2).

GMP has indicated that it will not propose or construct a wind generation facility on Lowell Mountain if the town of Lowell votes against it. The vote is scheduled for March 2, 2010.<sup>9</sup> GMP states that its preference is to install the proposed wind measurement towers as soon as possible in order to allow construction and installation to be completed before the end of the winter construction period and to maximize the amount of wind data. If a wind generation facility is pursued by GMP and it receives a CPG from the Board, GMP states that it plans to

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9. Exh. GMP-Supp-1 at 3.

choose and order turbines by the Spring of 2011, to permit project completion by December 31, 2012, in time to take advantage of currently available federal tax credits.<sup>10</sup>

GMP also contends that postponing construction of the project until after the March 2 Lowell town vote on the wind generation facility creates a potential that the project may not be completed before the April 15 end-of-winter construction season for Stormwater Permit purposes,<sup>11</sup> because construction will take a minimum of four weeks, and longer if any adverse weather conditions, including spring thaw, are encountered. If this were to occur, construction would be postponed until summer due to limitations associated with springtime construction under the Stormwater Permit. GMP maintains that it would thus not collect several months of wind data, thereby reducing the quality of information available for turbine selection and siting and increasing project cost and financing uncertainty.<sup>12</sup>

The proposed project will cost approximately \$500,000, with over \$372,000 related to equipment purchases and construction that occur only if the project is built. The proposed project will involve the construction of 1.7 miles of new woods road, the clearing of 2.25 acres of land, and the excavation of between approximately 450 square feet and 1,260 square feet for tower foundations and guy anchor footings. These costs and construction impacts might be incurred unnecessarily if the project is constructed before the March 2 vote. While delaying the construction until after the March 2 vote has the risk of construction being delayed by spring thaw, about six weeks of winter construction season would remain under the Stormwater Permit. I conclude that the risk of delaying construction into the summer season is justified by the possibility of avoiding significant costs and construction impacts associated with a potentially unnecessary project. Therefore, I am recommending that the CPG: (1) be contingent on the Lowell town vote supporting the wind generation project; and (2) include a condition requiring the construction of the proposed project to begin only after a positive vote on the generation project by the town on March 2, 2010.

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10. Exh. GMP-Supp-1 at 3.

11. The Stormwater Permit is described in Finding 41, below.

12. Exh. GMP-Supp-1 at 3; tr. 12/21/09 at 11 (Staskus).

**System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

34. The proposed wind measurement equipment and lights will not be connected to the electric system, and therefore will not adversely affect system stability or reliability. Staskus pf. at 12-13.

**Economic Benefit to the State**

[30 V.S.A. § 248(b)(4)]

35. The installation of the proposed wind measurement stations will have economic value to the state, due to temporary job creation resulting from permitting, construction, and monitoring and evaluation of data collected. In addition, the proposed project is a necessary evaluation step toward the development of a possible wind generation project, which, if proposed, permitted, and developed, will result in an economic benefit to the State and its residents by providing additional state and local tax revenues and provide renewably-produced electricity. Staskus pf. at 13.

**Discussion**

Both the Days and the Nelsons, adjoining property owners, contend that the proposed project will negatively impact their property values and make their property difficult to sell.<sup>13</sup> The Days further claim that the proposed project will negatively affect tourism in the area and possibly result in lost jobs.<sup>14</sup> The Days provided two analyses that relate to economic impacts of wind turbine electric generation, but that do not address the economic impact of wind measurement stations.<sup>15</sup> Given that the proposed wind measurement towers will be temporary, I conclude that there is limited potential for impact on property values or tourism. Therefore, I conclude that the evidence supports a finding that the proposed project will provide an economic benefit to the State.

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13. Day pf. at 7-8; Nelson pf. at 3.

14. Day pf. at 7-8.

15. Exhs. A-BD and B-BD.

**Aesthetics, Historic Sites, Air and Water Purity,**  
**the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

36. The proposed project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 37 through 90, below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

**Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

37. The proposed project will not have any undue adverse impacts on public health or safety. As a precaution, reflective signage warning of the proximity of wind measuring equipment will be placed on private property along an existing trail nearby Site A. Protective signage is not proposed for Sites B and C because there are no nearby trails. Staskus pf. at 13-14; exh. GMP-Supp-1 at 3.

**Outstanding Resource Waters**

[10 V.S.A. § 1424(a)(d)]

38. There are no waters in the vicinity of the proposed project that have been designated as outstanding resource waters. Prasch pf. at 4.

**Air Pollution**

[10 V.S.A. § 6086(a)(1)]

39. The proposed project will not result in undue air pollution. There will be no emissions from the project and it will emit no noise. Prasch pf. at 4.

**Discussion**

The Nelsons claim that they have occasionally heard whistling during certain weather conditions associated with the prior wind measurement tower located at Site B.<sup>16</sup> The Nelsons stated that the noise could not be heard inside, was infrequent, but annoying. Given that the potential for noise is infrequent and limited, I conclude that the proposed project will not result in undue adverse noise.

### **Water Pollution**

[10 V.S.A. § 6086(a)(1)]

40. The proposed project will not result in undue water pollution, as supported by findings 41 through 65, below. Prasch pf. at 4.

41. GMP had filed for the Department of Environmental Conservation's ("DEC") General National Pollutant Discharge Elimination System ("NPDES") Permit 3-9020, Authorization for Construction Stormwater Discharges, No. 6216-9020 ("Stormwater Permit"). GMP received authorization under the Stormwater Permit on September 22, 2009, covering construction phase stormwater discharges associated with the proposed project. Prasch pf. at 5; exh. GMP-Letter-2.

42. No herbicides will be used in the clearing and preparation of any of the proposed project sites. Staskus pf. at 5.

### **Headwaters**

[10 V.S.A. § 6086(a)(1)(A)]

43. The proposed project is located in a headwaters region, but impacts to water quality will be minimal. This finding is supported by findings 44 through 46, below.

44. There are steep slopes, greater than 15 percent, in some areas along the upper section of the new proposed access roads, and the drainage areas of several of the delineated features are less than 20 square miles. The wind measurement tower locations are located above 1,500 feet elevation. Prasch pf. at 5.

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16. Nelson pf. at 5; tr. 12/21/09 at 38 (S. Nelson).

45. Consistent with the requirements of the Stormwater Permit, water quality impacts will be minimal and there will be limited soil disturbance in order to anchor the wind measurement station foundations, guy wires and winch anchors. Prasch pf. at 5.

46. Any improvements and additions to the existing logging and woods road system for the proposed project will also follow Acceptable Management Practices, which are currently used by MMF in its logging activities. Prasch pf. at 5.

### **Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

47. The proposed project will meet applicable Department of Health and DEC regulations for the disposal of wastes, and will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells. Prasch pf. at 6.

48. Any meteorological station installation material debris will be limited and will be hauled off-site for disposal in accordance with applicable requirements. Any woody debris from the proposed project site will be used for soil stabilization or logs may be removed by the landowner. The proposed project will not generate waste on an ongoing basis. Prasch pf. at 6 and 9.

### **Water Conservation**

[10 V.S.A. § 6086(a)(1)(C)]

49. The proposed project will not utilize water during or after installation and therefore will consume no water other than water for the bagged concrete, which will be transported to the site with the towers and other equipment. Prasch pf. at 6; exh. GMP-Supp-1 at 1.

### **Floodways**

[10 V.S.A. §§ 6086(a)(1)(D)]

50. The proposed project is not located within a floodway or floodway fringe. Prasch pf. at 7.



**Streams**

[10 V.S.A. §§ 6086(a)(1)(E)]

51. The proposed wind measurement station sites will not be located near any streams. Any potential stream crossings along access routes will be maintained according to Acceptable Management Practices. The development and implementation of the Erosion Prevention and Sediment Control ("EPSC") practices required by the Stormwater Permit for the station sites and access roads will ensure no undue or adverse impacts on streams will result from this proposed project. Prasch pf. at 7.

**Shorelines**

[10 V.S.A. §§ 6086(a)(1)(F)]

52. No activities for the project are proposed to take place within areas defined as shorelines. As such, there will be no undue or adverse impacts to shorelines as a result of the proposed project. Prasch pf. at 8.

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

53. There are no Class I or II wetlands in the proposed project area. All delineated wetlands within the vicinity of the meteorological station sites or access roads are Class III. The measurement station sites and access roads will not be located within any of these Class III wetlands. There will be no undue or adverse impacts to identified wetlands as a result of the proposed project. Prasch pf. at 8; tr. 12/21/09 at 16 (Prasch).

**Sufficiency of Water and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(2)&(3)]

54. The proposed project will not use any water during or after construction and will not place a burden on any existing water supply, other than water for the bagged concrete, which will be transported to the site with the towers and other equipment. Prasch pf. at 9; exh. GMP-Supp-1 at 1.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

55. The proposed project will not result in unreasonable soil erosion or a reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by findings 56 through 65, below.

56. The EPSC practices required by the Stormwater Permit to manage disturbed soil during the proposed project construction will be followed. All areas of disturbed earth will be managed in accordance with EPSC practices as detailed in the Low Risk Site Handbook for Erosion Prevention and Sediment Control. Prasch pf. at 6.

57. The EPSC practices will include the installation of preventative measures, monitoring and maintenance of the measures, and inspections and proactive action taken to address areas that pose significant erosion potential. Through implementation of the EPSC practices, the proposed project will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. Prasch pf. at 9.

58. Soil disturbance in connection with the proposed project will be limited and located only in the area of the temporary measurement station locations and along new access roads. Access to the sites will be largely along existing logging roads, woods roads and trails. Any new access roads will be constructed and maintained according to Acceptable Management Practices and stabilized according to the EPSC practices. Prasch pf. at 9-10.

59. In connection with any tree clearing necessary at the tower sites, stumps and other brushy ground cover will be left in place, with no significant stumping or grubbing activities proposed. Logs may be removed by the landowner at its option. Brush that is cut will be spread out, providing ground cover. Prasch pf. at 9-10.

60. The proposed project will not cause unreasonable soil erosion or cause significant drainage or run-off problems. The effects of soil erosion on adjacent water bodies and wetlands will be managed in accordance within the proposed project's required EPSC practices. Prasch pf. at 8-9.

61. The practices required in the ANR Low Risk Site Handbook for Erosion Prevention and Sediment Control, including mulching of exposed areas with three inches of mulch, stabilization with fabric, and use of a stone-tracking pad to minimize vehicle impact, will adequately address soil impacts, including wet soils on steep slopes. Tr. 12/21/09 at 18-19 (Prasch).

62. The ANR Low Risk Site Handbook for Erosion Prevention and Sediment Control addresses both winter and summer season construction. Tr. 12/21/09 at 19 (Prasch).

63. In the event access occurs during the non-winter season, all access will include the installation of water-control measures, such as waterbars, and selective edge cutting for trail stabilization. Access roads will avoid rock outcrops, ledges, and swampy areas, and ditches will be used to divert water away from the road surface. Temporary water crossings will be achieved through a combination of pole culverts (sized in accordance with the Acceptable Management Practices), outsloping turn-ups and broad-based drainage dips, and will be stabilized where and as recommended by MMF's Forester. Slash and other debris will be kept out of the water crossings. Staskus pf. at 8-9.

64. In the event access occurs during the winter season, ground disturbance will be reduced, particularly during frozen ground conditions. Water crossings will consist of packed snow mats or felled trees. In the event that water diversion from the road surface is needed, snow banks and cut trees will be used. Staskus pf. at 9; tr. 12/21/09 at 17-18 (Prasch).

65. Following installation of the wind measurement stations, the new portion of the access routes will be maintained in accordance with Acceptable Management Practices, including, to the extent necessary, waterbars. Waterbars will be a minimum 8 inches deep and maximum 24 to 30 inches deep, typically at a 4-degree gradient, and drained away from the trail onto undisturbed litter or vegetation. Any ruts created during station installation will be filled, and all non-permanent water crossing structures removed and the channel restored. Staskus pf. at 9.

**Transportation Systems**

[10 V.S.A. § 6086(a)(5)]

66. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to use of highways, waterways, railways, airports and airways, and other means of transportation existing or proposed. This finding is supported by findings 67 and 68, below.

67. Wind measurement station components used for construction will be delivered to the initial access point at an existing log landing near Site A, which is approximately 0.6 miles from the end of Town Highway 28. Delivery will be accomplished via standard shipping transport. Staskus pf. at 8 and 14.

68. The Site B tower is less than 200 feet tall and therefore is not recommended for lighting by the FAA. The Sites A and C measurement towers are recommended for lighting and marking by the FAA, as described above. All necessary Determination of No Hazard findings have been acquired. Staskus pf. at 14; exh. GMP-Supp-1 at 3.

**Educational Services**

[10 V.S.A. § 6086(a)(6)]

69. The proposed project will not cause any burden on the town of Lowell educational services. GMP staff and subcontractors will maintain and monitor the wind measurement stations. There will be no new full- or part-time employees added to the region as a result of the proposed project, and therefore no increase in the number of students attending school. Staskus pf. at 14.

**Municipal Services**

[10 V.S.A. § 6086(a)(7)]

70. The proposed project will not require Lowell to provide or expand services related to fire and police protection, solid waste disposal, sewage treatment, water supply, rescue services, or road maintenance. Nor will installation or maintenance of the temporary wind measurement stations threaten public safety. Access to the sites is on roads controlled by MMF. Staskus pf. at 14-15.

**Aesthetics, Historic Sites**  
**and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

71. The proposed project will not have an undue adverse effect on the scenic or natural beauty, aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 72 through 86, below.

72. The dimensions of the towers are such that their visibility is limited from distances greater than 1 to 2 miles; beyond five miles these towers are difficult to discern with the naked eye. Exh. GMP-DR-1 at 15-16.

73. Based on a field study and a topographical map, which provided an evaluation of how the land form may block views of the tower, only 55 percent of the area within a five-mile radius will have potential visibility of one or more of the towers. About 83 percent of this potential viewshed is forested, further reducing potential visibility due to the forest canopy, even in winter (due to branch density and evergreens). Only 10 percent of the potential viewshed area is located in non-forested areas, and less than 1 percent is located on open waters. There are also many other focal points in the project area and the region, including broad panoramas and the main spine of the Green Mountains to the west, which attract the viewer's attention. Exh. GMP-DR-1 at 16-17.

74. The proposed temporary towers are being erected to record wind data and thus must be sited on higher elevations and above treelines. The proposed tower sites require about 0.75 acres of clearing, and vegetation will be allowed to grow back once towers are removed. The proposed project will rely on existing logging haul roads and woods roads to access the project sites. Where new roads are required, clearing will be no more than 1.7 miles and the roads will be developed to the minimum width necessary, ten feet. Staskus pf. at 8; exh. GMP-DR-1 at 19-20.

75. The clearing for access or installation of the proposed towers will not be so significant that it would make a perceptible change in the pattern of open space in the landscape. The prevalence of logging operations in the region has had a more visible impact on forest land and open space. Exh. DPS-MK-2 at 8.

76. The landscape does not have any observed structures of a similar height or character. The nearest ridgeline cellular towers appear to be at Jay Peak and Burke Mountain. Exh. DPS-MK-2 at 7.

77. Although some observers and residents are within close proximity to the proposed towers, within 0.5 miles, most observers and residents are well beyond one mile away, and the nearest major road corridors are approximately 2 miles away. Exh. DPS-MK-2 at 10.

78. Given the prominence of the ridgeline in the landscape, the towers will likely be seen as a background element. The resident population surrounding the project, although low, will generally have long-duration views. Travel corridors, particularly Route 100, will have generally long duration views providing visibility of portions of two or more proposed towers. From the north-south travel corridors, Lowell Mountain does not dominate as a focal point, but is viewed rather as backdrop. Views looking south from Route 58 are likely to be limited to the proposed tower at Site A and a small portion of the proposed tower at Site B. Exh. DPS-MK-2 at 8 and 10.

79. The gray, galvanized steel form proposed for the towers will tend to diminish its visual impact along the ridgeline. The mass of the proposed towers is quite low given its lattice form and narrow width. Any painting of the proposed towers at Sites A and C to conform with FAA marking guidelines will be unlikely to be discernable from vantage points below the towers. Exh. DPS-MK-2 at 7-8.

80. The FAA-guideline lighting of the proposed project is designed to be most visible to approaching aircraft, with its focus projected upward from the 40-meter and 80-meter elevation points on the proposed towers at Sites A and C. While the lighting will be visible, it will be focused away from ground observers. Exh. DPS-MK-2 at 10.

81. The Lowell Town Plan, dated 2003 and readopted in 2009, includes no specific community standards that would preclude the construction of temporary (or permanent) wind measurement stations. The Northeast Vermont Development Association's 2006 Regional Plan addresses maintenance of scenic quality in minimizing the impacts of energy generation and transmission facilities. The Plan also encourages the development of renewable energy and the use of renewable resources. There are no specific standards with regard to scenic resources in the

Plan. The temporary nature of the proposed project avoids any lasting impacts to scenic quality or aesthetics. Exh. GMP-DR-1 at 20-21; tr. 12/21/09 at 121-22 (Raphael).

82. The Nelson property is approximately 4500 feet from the nearest proposed wind measurement tower. The Nelson property, known also as Breezy Acres Farm, was formally listed on the Vermont State Register of Historic Places on September 23, 2003. Tr. 12/21/09 at 29 (D. Nelson); exh. Nelson-1.

83. There are three sites of historic significance in Albany and eleven in Eden that are within a five-mile radius of the proposed project, including a portion of the Bayley-Hazen Road that is adjacent to Lowell Mountain. Based on a field investigation, the proposed project will not undermine an important or identified visual resource associated with these historic resources, will not distract from them, will not affect the appreciation or experience of them, nor impair the public's ability to interpret their qualities. Exh. GMP-DR-1 at 18-20.

84. Based on discussions with the University of Vermont Consulting Archeology Program and a review of the Division for Historic Preservation Archeological Information System map, there are no known archeological features in the Area of Potential Effect, consisting of the access roads and station sites, and the proposed project will have no effect on significant archeological resources. Staskus pf. at 15.

85. The Vermont Department of Fish and Wildlife has mapped areas of Montane Spruce-Fir Forest community (S3 rank<sup>17</sup>) at discreet locations along the ridgeline. Site B is the only site located within this mapped habitat type. Site A is located within an open canopy stand of yellow birch, paper birch, and sugar maple with hobblebush in the understory. Site C is also located within an open canopy of yellow birch with wood fern forming nearly a closed cover within the herbaceous layer of the understory. Prasch pf. at 10.

86. Only minimal tree clearing will be required for installation of the meteorological stations, particularly at Site B, where the overstory of spruce and fir had been cleared approximately 5 years ago for installation of the previous meteorological station. Regeneration of spruce and fir saplings in this area is robust and, since the meteorological station at Site B will

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17. Conservation ranks incorporate the rarity of and threats to a species or natural community in Vermont; S3 is a rank of uncommon (generally more than 20 occurrences statewide for plants and animals).

be installed at the same location as the previous measurement site, any additional clearing of spruce and fir will not be significant. Prasch pf. at 10.

### Discussion

Based on the above findings, I find that the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, I have relied on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. *Quechee Lakes Corporation*, #3W04 1 1-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps will not be taken to improve the harmony of the project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these three standards will be significantly informed by the overall societal benefits of the project.<sup>18</sup>

GMP's expert witness has concluded that the proposed wind measurement towers will not result in an adverse aesthetic impact, and that even if the aesthetic impact was considered adverse, it would not be unduly adverse.<sup>19</sup> The Department's expert witness conducted his own site visits and analysis of the aesthetic impacts of the proposed wind measurement towers. The Department's expert witness has concluded that, given the proposed project's location along a broad ridgeline visible from public vantage points, the project's impacts will be adverse to the

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18. *In re: Northwest Vt. Reliability Project*, Docket 6860, Order of 11/28/05 at 80; *Northern Loop Project*, Docket 6792, Order of 7/17/03 at 28; *Petition of UPC Vermont Wind, LLC*, Docket 7156, Order of 8/8/07 at 65.

19. Raphael pf. at 4.



scenic resource.<sup>20</sup> The Department's witness determined that residents within the viewshed and travelers on Route 100 would have generally long-duration views of the proposed towers and that the towers themselves will be incompatible with their surroundings, leading to the conclusion of adverse impact.<sup>21</sup> The Department's expert witness further concluded that the proposed project would not result in an undue adverse impact. Using the Quechee test as a guide, the Department's expert witness asserted that these impacts are not shocking or offensive, that the project does not violate a clearly written standard, and that GMP has taken measures that are reasonable to reduce these impacts.<sup>22</sup>

Both the Nelsons and Days, adjoining property owners, claimed that the proposed towers will have an undue adverse impact on aesthetics, especially at night due to the tower lighting.<sup>23</sup> The Nelsons further state they could view the proposed wind measurement towers from twenty miles away.<sup>24</sup> GMP's expert witness contends that is very difficult to see from a distance of twenty miles with the unaided eye.<sup>25</sup>

Given the facts of this case, it would be difficult to find that the three proposed towers do not have an adverse effect on the aesthetics of the area. Residents within the viewshed and travelers from the east and west will have generally long-duration views of the proposed towers and the height and lighting of the towers will be incompatible with their surroundings. This conclusion was supported by the Department, adjoining landowners, and other members of the public.

While acknowledging the overall adverse aesthetic impact of proposed towers, the record is clear that the Petitioners have taken generally available steps to mitigate the impact of the proposed project and improve the harmony of the project with its surroundings. The proposed project includes: (1) towers that are thin, grey in color, and minimal in mass, reducing visibility; (2) lighting and marking that is visible, but focused away from ground observers; (3) significantly

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20. Kane pf. at 6.

21. Exh. DPS-MK-2 at 8-9.

22. Exh. DPS-MK-2 at 9-12.

23. Nelson pf. at 2; Day pf. at 8-9.

24. Nelson pf. at 2.

25. Tr. 12/21/09 at 39 (Raphael).

limited clearing that is necessary for installation of the towers; and (4) towers that are temporary. In addition, the proposed project does not violate a clear written community standard intended to preserve aesthetics or scenic beauty in the project area. While the proposed project will be visible, I conclude that it will not dominate the landscape and will not offend the sensibilities of the average person. Based upon the applicable law and the facts presented in this case and the temporary nature of the project, I conclude that the proposed project will not result in an undue adverse effect on aesthetics or on the scenic or natural beauty of the project area.

The Nelson property is listed on the State Historic Register and they have raised concerns about the proposed project's impact on their historic property. There are several identified sites of historic significance within the five-mile radius of the proposed project, but none are located on the proposed project property. Given my conclusion that the proposed project will not have undue adverse effect on aesthetics and the evidence described in Finding 83, I conclude that the proposed project will not have an adverse effect on historic properties.

### **Necessary Wildlife Habitat and Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

87. The proposed project will not have an undue, adverse impact on any necessary wildlife habitat and endangered species. This finding is supported by findings 88 and 89, below.

88. The Non-game and Natural Heritage Program ("NNHP"), regarding known occurrences of rare, threatened, and endangered ("RTE") plants, has no listings of any federally or state protected plant species within the locations of the wind measurement stations or access roads. A field survey for occurrences of RTE plants confirmed the NNHP records. Prasch pf. at 11.

89. Given that the access routes to the meteorological station sites will primarily utilize existing logging roads and that the clearing necessary for new access roads will be limited to 1.7 miles, there will be no undue adverse impact to necessary wildlife habitat, including potential habitat for both black bear and white-tailed deer. There is also no anticipated impact to wetlands that may be utilized by black bears. Prasch pf. at 11-12.

**Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

90. The proposed project will not unnecessarily or unreasonably endanger the public or quasi-public investment in any public facilities, services or lands, or materially jeopardize or interfere with the function, efficiency, or safety of the public's use or enjoyment of or access to any such facility, service or lands. Staskus pf. at 15.

**Least-Cost Integrated Resource Plan**

[30 V.S.A. § 248(b)(6)]

91. The proposed project is consistent with the provisions of GMP's 2007 Integrated Resource Plan ("IRP"). The proposed project, as a component of evaluating the desirability of developing GMP-owned wind generation in Lowell, facilitates the potential acquisition of new renewable resources. GMP's 2007 IRP encourages the acquisition of in-state new renewables. The proposed project is part of GMP's energy plan for meeting renewables requirements. Staskus pf. at 16.

**Compliance with Electric Energy Plan**

[30 V.S.A. § 248(b)(7)]

92. The proposed project complies with the *Vermont Electric Plan* (the "Plan").<sup>26</sup> Electric policy described in the Plan includes providing service "in a manner that is consistent with efforts to protect the quality of the environment over time." The Plan states that meeting Vermont's energy needs in a sustainable way "means making a long-term commitment to maintain the appropriate contributions from renewable resources and minimizing our dependence on imported fossil fuels." The Plan describes wind power as technologically viable and ecologically acceptable. Staskus pf. at 16.

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26. In accordance with 30 V.S.A. § 246(b), an applicant for a certificate of public good for a meteorological station shall be exempt from the requirements of Section 202(f) that it request a determination by the Department that the proposed action is consistent with the Plan.

**Outstanding Resource Waters****[30 V.S.A. § 248(b)(8)]**

93. The proposed project will not affect any outstanding resource waters of the State, as there are no waters in the vicinity of the proposed project that have been designated as outstanding resource waters. Prasch pf. at 4.

**Waste to Energy Facilities****[30 V.S.A. § 248(b)(9)]**

94. This criterion is not applicable to the proposed project.

**Existing or Planned Transmission Facilities****[30 V.S.A. § 248(b)(10)]**

95. The proposed project will not be served by any transmission facilities, existing or planned. Staskus pf. at 16.

**V. DISCUSSION**

GMP has indicated that it will not propose or construct a wind generation facility on Lowell Mountain if the town of Lowell votes against it. The vote is scheduled for March 2, 2010. Therefore, I am recommending that the CPG: (1) be contingent on a Lowell town vote supporting the wind generation project; and (2) include a condition requiring the construction of the proposed project to begin after March 2, 2010.

Assuming GMP decides to pursue a future wind generation project on Lowell Mountain after the March 2 vote, GMP has provided sufficient evidence to demonstrate that the proposed project complies with Section 248 criteria. I recommend that the Board issue a CPG authorizing construction of the proposed project.

**VI. CONCLUSION**

Based upon the evidence in the record, I conclude that the proposed project, with the conditions identified below:

- (a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, and the recommendations of the municipal legislative bodies;
- (b) is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and land management measures;
- (c) will not adversely affect system stability and reliability;
- (d) will result in an economic benefit to the state and its residents;
- (e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) and §§ 6086(a)(1) through (8) and (9)(K);
- (f) is consistent with the principles of least-cost integrated resource planning;
- (g) is in compliance with the electric energy plan approved by the DPS under § 202 of Title 30 V.S.A.;
- (h) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Water Resources Board;
- (i) does not involve a waste-to-energy facility; and
- (j) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

I recommend that the Board approve the proposed project contingent on the March 2, 2010, Lowell town vote, and issue a CPG for construction of the proposed project with the conditions set forth in the Order.

Dated at Montpelier, Vermont, this 14 day of January, 2010.

s/Mary Jo Krolewski  
Mary Jo Krolewski  
Hearing Officer

## **VII. BOARD DISCUSSION**

After reviewing the comments on the Proposal for Decision ("PFD"), we adopt the Hearing Officer's PFD, with some clarifications, for the reasons set forth below.

On January 27, 2010, the Nelsons filed a letter stating that the Board should deny a certificate of public good to GMP. The Nelsons do not raise any specific objections to the PFD. The Nelsons raise concerns about GMP's expert witness being considered as the "average" person for purposes of the Quechee test, but do not comment on any specific conclusions of the PFD, nor the conclusions of the Department of Public Service's expert witness. The Nelsons also raise concerns with regard to the proposed wind measurement towers' impacts on property values and aesthetics, but do not present any new arguments on these issues.<sup>27</sup>

On January 28, 2010, GMP filed a letter stating that it supported the PFD and urged the Board to adopt it.

While we adopt the Hearing Officer's proposed findings and conclusions with regard to economic benefit to the state, we wish to further clarify the conclusions. The Hearing Officer has concluded that the proposed wind measurement towers have limited potential for impact on property values and tourism. As supported by Finding 35, the proposed wind measurement towers will have economic value to the state, due to temporary job creation. In addition, as supported by Finding 35, the proposed wind measurement towers are a necessary evaluation step toward the development of a possible wind generation project, which, if proposed, permitted, and developed, will result in an economic benefit to the State and its residents. Therefore, we conclude that the evidence supports a finding that the proposed wind measurement towers will provide an economic benefit to the State.

We adopt the Hearing Officer's proposed findings with regard to air pollution, but we further clarify the conclusions. As the Hearing Officer noted in the PFD, the Nelsons have presented no evidence, outside of their own non-expert testimony, as to the noise heard from a prior wind measurement tower located at Site B of the proposed wind measurement towers. The

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27. The Nelsons raise additional issues regarding a "logging road" that was built last summer and being personally subject to site visits and other behaviors to which they object. The Nelsons do not indicate how these issues are relevant to Section 248 criteria, nor how the PFD may be deficient.

Nelsons have not provided any additional information how noise issues from the previous project might apply to the proposed wind measurement towers. Finding 39 concludes that no noise will be emitted from the proposed wind measurement towers. Therefore, we conclude that the proposed wind measurement towers will not result in any undue adverse noise.

### **VIII. ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The findings, conclusions, and recommendations of the Hearing Officer are adopted.
2. Construction of the proposed project by Green Mountain Power Corporation will promote the general good of the State of Vermont, and a certificate of public good to that effect shall be issued.
3. Construction shall be contingent on a March 2, 2010, Lowell Town Vote supporting a potential future wind generation project on Lowell Mountain and Green Mountain Power Corporation's intention to pursue a wind generation project. Green Mountain Power Corporation shall file with a letter with the Board of their intention to pursue a wind generation project on Lowell Mountain within one week following the Lowell Town Vote.
4. Construction shall not begin before March 2, 2010.
5. Construction, operation, and maintenance shall be in accordance with the plans as submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
6. Green Mountain Power Corporation shall remove the three wind measurement towers and associated equipment within five years of the date of the certificate of public good in this docket.
7. Upon removal of the wind measurement towers, the tower sites shall be restored in accordance with the plans as submitted in these proceedings.
8. All construction activities shall be in compliance with the Agency of Natural Resources' Low Risk Site Handbook for Soil Erosion Prevention and Sediment Control.
9. All roads and access activities associated with the project shall comply with the construction and erosion control measures provided in the Agency of Natural Resources' Parks

and Recreation's Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont.

Dated at Montpelier, Vermont, this 8th day of February, 2010.

|                        |   |                |
|------------------------|---|----------------|
| <u>s/James Volz</u>    | ) |                |
|                        | ) | PUBLIC SERVICE |
|                        | ) |                |
| <u>s/David C. Coen</u> | ) | BOARD          |
|                        | ) |                |
|                        | ) | OF VERMONT     |
| <u>s/John D. Burke</u> | ) |                |

OFFICE OF THE CLERK

FILED: February 8, 2010

ATTEST: s/Judith C. Whitney  
Deputy Clerk of the Board

*Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*